Grant No: SEANWS-2019-JeCoWS-00007

PROJECT TITLE: Jefferson County MRC Operations and Projects

TASK NUMBER: 3-Rain gardens and stormwater

T3.2

Year one summary report of project activities (including partnerships, sign-in sheets, permits, media articles, photos and any results of evaluation of participants to measure increased knowledge)

PERIOD COVERED: October 1, 2019 – September 30, 2020

DATE SUBMITTED: October 21, 2020









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2020 Rain Gardens Summary Report

This report includes a summary of rain garden project activities in East Jefferson County between October 2019 and September 2020, including details for the two rain garden installations, partnerships, photos, and results of the rain garden webinar.

Project Lead: Judy Surber

Subcommittee Members: Troy McKelvey, Heather Burns, Pam Petranek, Brenda Johnson

Project overview

The Jefferson MRC works closely with WSU Extension, the City of Port Townsend, and other partners to build a network of rain gardens in suitable, priority locations throughout East Jefferson County. Rain gardens treat stormwater runoff, removing contaminants and improving water quality to benefit eelgrass habitat, shellfish beds and other adjacent subtidal non-vegetated areas. Expected outcomes of this project include reduced flow of contaminated stormwater and increased understanding about stormwater issues through volunteer engagement in rain garden workdays. Despite challenges with COVID-19 this year, the Jefferson MRC was able to complete the installation of two rain gardens, in June and September of 2020, adding to a total cumulative area of 9,116 sq. ft. for all 12 MRC co-sponsored rain gardens in the last 6 years. We adapted to safety guidelines by hosting a virtual two-part rain garden training for professionals and high-level volunteers in place of what was originally planned to be an in-person workshop. Additionally, rain garden workdays were limited to staff members, ensuring only 5 or less people were on site and wearing face masks in compliance with county Phase 2 and WSU guidelines.

Partnerships

This year, the Jefferson MRC worked closely with WSU Jefferson County Extension, the Native Plant Salvage Foundation, the Cape George community association, the City of Port Townsend, and homeowners fronting the Clay and Benton rain garden. For the first rain garden installation at Cape George, the MRC and WSU Extension worked with the Cape George community to identify the rain garden location and to select plants based on desired functions and aesthetics. The Cape George community contributed to the purchase of materials, including plants, rock, deer fencing, irrigation pipe and fittings. They also directly contributed sweat and time towards the installation, helping with the excavation and caretaking of plants which sat much longer than anticipated due to the delays following the Stay Home order restrictions. Native Plant Salvage Foundation staff member Erica Guttman recommended which plants should be planted based on community needs and ability to maintain the rain garden, and she directly helped with the installation. An AmeriCorp volunteer with the Foundation, WSU Master Gardener Coordinator, Bob Simmons, and the Jefferson MRC Coordinator also directly helped with the installation.

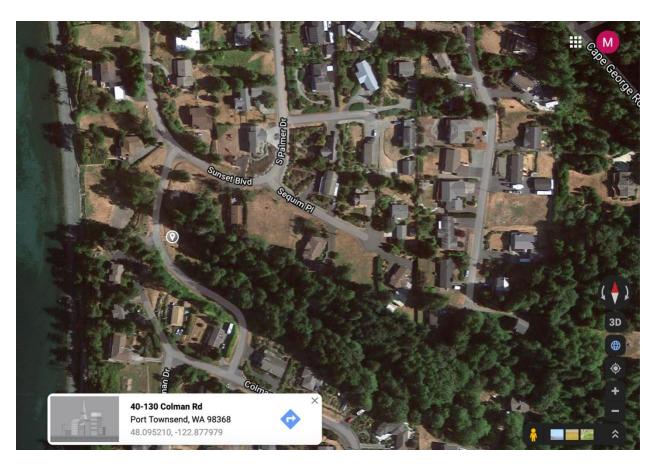
For the second rain garden installation in Uptown Port Townsend, the MRC and WSU Extension worked closely with the City of Port Townsend. The City generated a list of potential rain garden sites for the MRC to select from, waived permit fees, excavated and graded the selected site under Bob's supervision, supplied and backfilled with rain garden soil mix, provided mulch and placed rock/concrete fill as necessary to prevent erosion near the inflow and outflow areas. WSU Extension Faculty lead Bob Simmons developed the rain garden design, worked with City

engineers and planners, obtained approval from landowners, and directly helped with the installation. The Native Plant Salvage Foundation staff member Erica Guttman served as the plant consultant. Their staff procured the plants, developed the plant design, and provided tools. They again donated their AmeriCorps volunteers' time towards the second installations. The WSU Master Gardener Coordinator, Bob Simmons, and the Jefferson MRC Coordinator also directly helped with the installation.

Rain Garden Installations

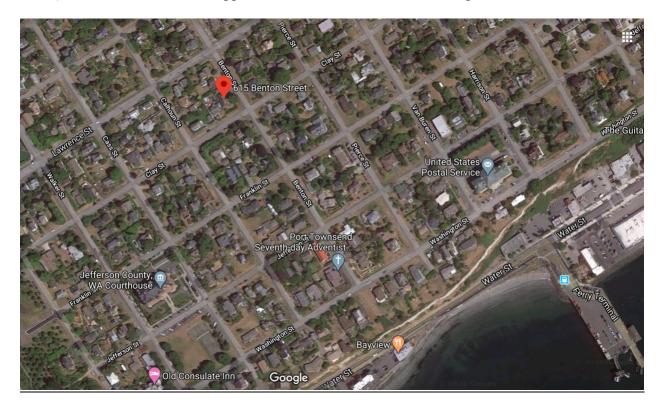
The first rain garden installation occurred on June 22nd and 23rd in the Cape George community, a private residential community located about four miles west and slightly south of Port Townsend. It is a high visibility site within this private community, situated adjacently to a frequented walking trail and upland from a small community beach park. The site sits at the bottom of two hills along Colman Road, and drains into the NE portion of Discovery Bay where the bay opens up to the Strait of Juan de Fuca.

<u>Location of the first rain garden</u>: Along Colman Road, between Sunset Boulevard and Colman Drive, in the Cape George community. The dimensions of the Cape George rain garden are 22 x 32 feet.



The second rain garden installation occurred on September 23rd at the NW corner of Clay and Benton Streets in Uptown Port Townsend. The homeowners are very enthusiastic about having a rain garden to help with the runoff here and are willing to help maintain it. Surrounding neighbors are also very supportive. This neighborhood experiences significant traffic by pedestrians and cyclists avoiding the much busier Lawrence Street that runs parallel to Clay Street, making this particular site an ideal education opportunity. On the day of installation, about 20-30 pedestrians, cyclists, and drivers stopped by to express appreciation for the rain garden installation. Having a rain garden at this site will also reduce the stormwater runoff flowing to the rain garden at the Jefferson County Courthouse, which occasionally becomes overwhelmed when there is more than 0.25" of rain.

<u>Location of the second rain garden</u>: The NW corner of Benton and Clay streets (615 Benton Street) in Port Townsend. The approximated dimensions for this rain garden are 16 x 40 feet.



<u>Photos</u>
First rain garden installation at Cape George











Second rain garden installation: Benton & Clay Streets in Uptown Port Townsend













Rain Garden Training Webinar

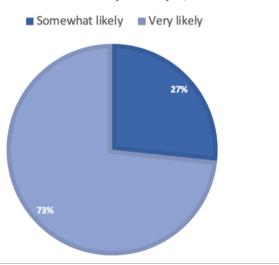
A two-part webinar series designed for professional landscapers and high-level volunteers was held on June 9th and 16th via Zoom. The webinars were originally planned as two-day in-person workshops scheduled for March 24th and March 31st. However, due to the pandemic, we transitioned to Zoom. WSU Master Gardener Coordinator Bridget Gregg was hired to organize and host the webinar. The featured presenters were Bob Simmons, WSU Extension's Olympic Region Water Resources Specialist, and Erica Guttman, a hands-on environmental educator with the Native Plant Salvage Foundation – both have worked closely with the Jefferson MRC on designing and installing rain gardens in East Jefferson County over the last six years.

The first webinar, "Water, Rain Garden Science, and Installation Basics," spanned two hours, covering an introduction to storm water and water resources, the concept of rain gardens, a planning overview (site identification, sizing, planning, inflow/outflow and ponding), and a construction overview. There was an additional 30 minutes that was optional and provided supplemental information on soil mix options, refilling, and building on a slope. The second webinar, "Plant Design Principles, Maintenance, & Managing Changes Over Time," spanned two hours, covering planting plan principles; site assessment and goals; plant procurement considerations and bioretention zones; inspection, monitoring and maintenance; and rain garden costs, with examples for reducing costs. There was an additional 30 minutes that was optional and provided supplemental information on plant selection, with examples and options.

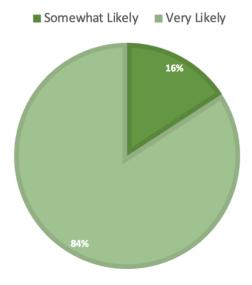
There were 49 registrants and 35 attendees for part one and 43 registrants and 31 attendees for part two of the webinar series. In total, 42 different individuals participated in the webinar series, including the MRC Coordinator and four MRC members. Though some respondents (16

total) had some previous experience designing and installing rain gardens (2 responses), the majority were just learning about rain gardens through the webinar (12 responses). When asked, "How likely is it that you will use the information in today's webinar?" 73% responded "very likely" and 27% responded "somewhat likely" for part one (15 total respondents). When asked the same question for part two, 84% responded "very likely" and 16% responded "somewhat likely" (19 total respondents). The majority of respondents felt that the webinar helped them to understand rain garden concepts better, and some felt they gained insight to a lot of material that was completely new to them. Finally, the large majority of respondents planned to either assist with or install their own rain gardens within the next year.

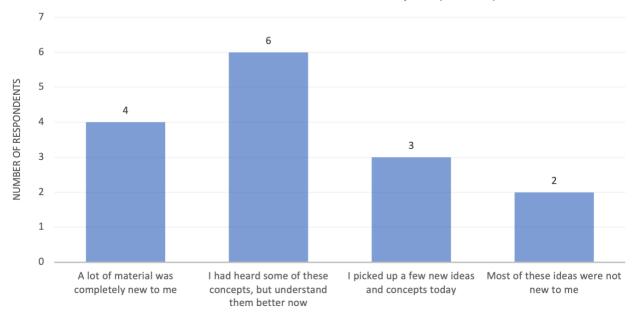
HOW LIKELY IS IT THAT YOU WILL USE THE INFORMATION FROM TODAY'S WEBINAR (PART 1)? (15 RESPONDENTS)



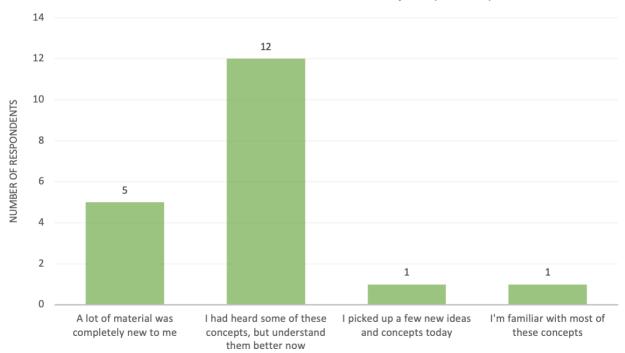
HOW LIKELY IS IT THAT YOU WILL USE THE INFORMATION FROM TODAY'S WEBINAR (PART 2)? (19 RESPONDENTS)



How novel were these ideas for you (Part 1)?



How novel were these ideas for you (Part 2)?



In the next year do you plan to:

